



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,841	09/15/2003	Kenneth R. Schmidt	GP-303099	1190

7590 12/13/2004

KATHRYN A MARRA
General Motors Corporation
Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

MCHENRY, KEVIN L

ART UNIT	PAPER NUMBER
----------	--------------

1725

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,841

Applicant(s)

SCHMIDT ET AL.

Examiner

Kevin L. McHenry

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,9 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7,10-14 and 18 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/15/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 13c. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 16 recites the limitation "the bridging member" in line 1 of claim 16. There is insufficient antecedent basis for this limitation in the claim. For examination purposes the examiner interpreted this language to mean "the bracket member".

5. Claim 17 recites the limitation "the bridging member" in line 1 of claim 17. There is insufficient antecedent basis for this limitation in the claim. For examination purposes the examiner interpreted this language to mean "the bracket member".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rees (U.S.P. 4,347,810).

Rees teaches a combustion chamber structure in which strips are welded to U shaped sections which are in turn welded to tubes. Rees teaches the use of fillet welds. (See U.S.P. 4,347,810; Figure 3; column 2, lines 67-68; column 3, lines 1-19).

8. Claims 1, 6, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (U.S.P. 6,773,048)

Freeman an assembly in which a reinforcing tube is fusion-welded to a bridging

member that is in turn spot welded to a sheet or attachment portion. (See U.S.P. 6,773,048; column 6, lines 25-64).

9. Claims 1, 6, 10, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ledwinka (U.S.P. 2,205,797).

Ledwinka teaches a vehicle body in which a roof panel is spot welded to holding strip that is spot welded to a box section. (See U.S.P. 2,205,797; Figure 4; column 2, lines 25-55; column 3, lines 1-19).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 3, 7, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (U.S.P. 6,773,048) as applied to claims 1, 6, 10, and 12 above.

Freeman teaches the assembly taught above in section 8. However, Freeman does not teach the use of arc welding or a tube thickness.

It would have been obvious to one of ordinary skill in the art at the time that the applicant's invention was made to use arc welding as a fusion welding means. One would have been motivated to use arc welding to provide strong fusion bonds and to use

a process that is cheap and readily available. One of ordinary skill would have been motivated to select a tube thickness that provides proper heat transfer properties while providing sufficient strength and rigidity to the structure.

12. Claims 7, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ledwinka (U.S.P. 2,205,797) as applied to claims 1, 6, 10, 12, and 14 above.

Ledwinka teaches the assembly taught above in section 9. However, Ledwinka does not teach a tube thickness or multiple bridging members.

It would have been obvious to one of ordinary skill in the art at the time that the applicant's invention was made to have selected a tube thickness that provided sufficient strength and rigidity to the structure. One of ordinary skill would have recognized that multiple bridging members and a single strip perform the same function of attaching a roof panel to a box section. One of ordinary skill would have been motivated to select multiple members in order to save on material costs.

Allowable Subject Matter

13. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Claims 8, 9, and 15-15 are allowed.

15. The following is an examiner's statement of reasons for allowance: the instant application is deemed to be a nonobvious improvement over the inventions of Rees, Freeman, and Ledwinka. The improvements comprise a metal patch bridging member

that has its edges, or legs, welded to the tube and its major side, or web section, spot welded to the sheet.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 57-164,837, JP 61-16,174, JP 58-149,866, Chen et al. (U.S.P. 6,765,170), Okana et al. (U.S.P. 6,322,135), Johnson (U.S.P. 3,145,456), McChesney (U.S.P. 2,731,245), Harvey (U.S.P. 5,423,564), Morris et al. (U.S.P. 3,362,058), Bertels (U.S.P. 3,202,793), and Bennett (U.S.P. 4,168,795) are cited of interest for illustrating the state of the art in tube structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin L. McHenry whose telephone number is (571) 272-1181. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin McHenry

KILEY S. STONER
PRIMARY EXAMINER

Kiley Stoner 12/9/04